Motor Test Report



Model: MM5024FC/NV

Description: MaxMotion 0.50HP, 1750RPM, 24VDC, TEFC/NV, 56C

Tester: 01

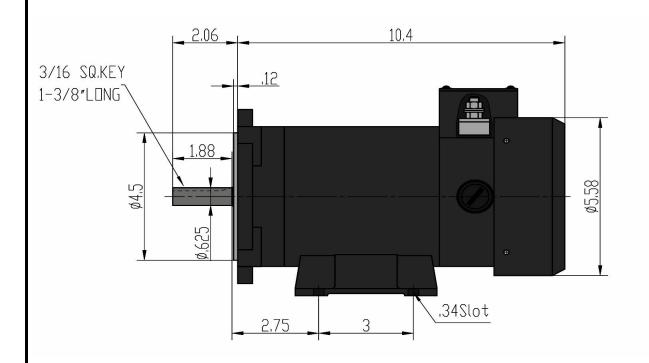
Test Date: 2019.03.07

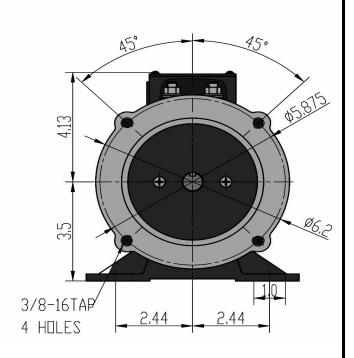
V	A	W In	RPM	W out	Eff.%		W In
28	18	450	2500	350	70		W Out
25.2	16.2	405	2250	315	63		Volts
22.4	14.4	360	2000	280	56		Voits
19.6	12.6	315	1750	245	49		+ T
16.8	10.8	270	1500	210	42	Eff	RPM
14	9	225	1250	175	35		ļ
11.2	7.2	180	1000	140	28	<u> </u>	ļ
8.4	5.4	135	750	105	21	 	
5.6	3.6	90	500	70	14		ļ
2.8	1.8	45	250	35	7		ļ
0	0	0	0	0	0		
'	•	•	'			0 0.5 1 1.5 2 Toro	2. 5 jue N.m.

Measured Points	V	Α	Input Watts	N.m.	RPM	Output Watts	%
No Load	24.58	3.728	91.62	0.04	1809	7.576	8.3%
Rated	24.27	15.88	385.4	1.56	1527	250	64.8%
Efficiency Max.	24.35	12.39	301.6	1.18	1607	198.5	65.8%
Max. Kw Output	24.22	17.81	431.5	1.81	14.83	281.3	65.2%
Max. Torq. Output	24.22	17.81	431.5	1.81	14.83	281.3	65.2%
End	24.22	17.81	431.5	1.81	14.83	281.3	65.2%

Load	Measure	V	Α	Input Watts	N.m.	RPM	Output Watts	Eff %
3.1%	1	24.53	2.287	56.11	0.06	1957	11.47	20.4%
3.5%	2	24.53	2.318	56.85	0.06	1958	13.12	23.1%
5.7%	3	24.52	2.57	63.04	0.1	1954	21.28	33.8%
9.4%	4	24.5	3.124	76.56	0.17	1943	35.40	46.2%
14.1%	5	24.48	4.052	99.19	0.26	1926	52.83	53.3%
23.3%	6	24.43	5.496	134.3	0.44	1899	87.48	65.1%
32.9%	7	24.39	7.034	171.5	0.63	1870	123.3	71.9%
46.7%	8	24.33	9.375	228.0	0.92	1826	175.1	76.8%
61.5%	9	24.26	12.000	291.2	1.24	1781	230.5	79.2%
77.1%	10	24.19	14.86	359.3	1.6	1730	289.1	80.5%
91.8%	11	24.11	18.23	439.4	1.96	1675	344.1	78.3%
100.0%	12	24.07	19.99	481.0	2.18	1646	375.0	77.9%
103.4%	13	24.05	20.71	498.1	2.27	1634	387.7	77.8%

Max Motion





Customer is responsable in determining that MaxMotion product will fit/perform suitably in the intended application								n: 1NIN	Revised: April 2020	
HP	IP RPM Voltage		Amps	Const. Fram		Insul.	Torque	P. Code	Wgt lbs	Rated
0,5	1750	24Vdc	23,56	TEFC	56C	Class H	18 in/lbs	K (SCR)	25	IP45

MM5024FC

LOW VOLTAGE DC PERMANENT MAGNET MOTOR

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 12, 24, 48VDC



Applications:

Low voltage permanent magnet DC motors are suitable for installations having batteries or generator supplied low voltage DC.



Features:

Design - Low voltage

Construction - Rolled Steel, NEMA C-Face Footed with Removable Base

Agency listings and standard - NEMA, UL Recognized and CSA Certified, RoHS Compliant

Service Factor - 1.0

IP Rating - IP45

Insulation - Class F Insulation

Speed Range - 20:1 Constant Torque, Linear Speed/Torque Characteristics over entire speed range

Voltage - 12V, 24V & 48V

Bearings - Permanently Lubricated High quality Double Shielded Ball Bearings

Enclosure Protection - (TEFC) Totally Enclosed Fan Cooled & (TENV) Totally Enclosed Non-Ventilated

Duty - Continuous

Warranty - 18 Months



LOW VOLTAGE DC PERMANENT MAGNET MOTOR

HEAVY GAUGE ROLLED STEEL CONSTRUCTION | TENV TOTALLY NON-VENTILATED & TEFC TOTALLY ENCLOSED FAN COOLED SCR RATED, 12, 24, 48VDC



НР	FL RPM	VOLTS	FRAME	CAT NO.	CONSTRUCTION	ENCLOSURE	NOM EFF.	F.L. AMPS	DE BEARING	NDE BEARING	WT (Lbs)	"C" Dimension (Inch)
	1680	12	56C	MM2512NV	ROLLED STEEL	TENV	62,40%	30,9	6203	6203	21	10,01
0,25	1680	12	56C	MM2512FC	ROLLED STEEL	TEFC	62,40%	30,9	6203	6203	21	11,6
0,23	1758	24	56C	MM2524FC	ROLLED STEEL	TEFC	62,80%	15,46	6203	6203	21	11,6
	1815	48	56C	MM2548FC	ROLLED STEEL	TEFC	67,50%	7,73	6203	6203	21	11,6
	1789	12	56C	MM3312NV	ROLLED STEEL	TENV	71,30%	38,3	6203	6203	23	10,01
	1789	12	56C	MM3312FC	ROLLED STEEL	TEFC	71,30%	38,3	6203	6203	23	11,6
1/3	1527	24	56C	MM3324NV	ROLLED STEEL	TENV	64,80%	19,1	6203	6203	23	10,01
	1527	24	56C	MM3324FC	ROLLED STEEL	TEFC	64,80%	19,1	6203	6203	23	11,6
	1753	48	56C	MM3348FC	ROLLED STEEL	TEFC	71,40%	9,56	6203	6203	23	11,6
	1714	12	56C	MM5012NV	ROLLED STEEL	TENV	70,90%	47,16	6203	6203	25	10,95
	1714	12	56C	MM5012FC	ROLLED STEEL	TEFC	70,90%	47,12	6203	6203	25	12,49
0,5	1646	24	56C	MM5024FC	ROLLED STEEL	TEFC	77,90%	23,56	6203	6203	25	12,49
	1678	24	56C	MM5048NV	ROLLED STEEL	TENV	78,50%	11,78	6203	6203	25	10,95
	1678	48	56C	MM5048FC	ROLLED STEEL	TEFC	78,50%	11,78	6203	6203	25	12,49
0,75	1573	12	56C	MM7512FC	ROLLED STEEL	TEFC	73,80%	73,6	6203	6203	30	13,55
	1775	24	56C	MM7524FC	ROLLED STEEL	TEFC	75,20%	31,8	6203	6203	30	13,55
1	1672	12	56C	MM1012FC	ROLLED STEEL	TEFC	74,30%	95,4	6203	6203	32	14,3
1	1764	24	56C	MM1024FC	ROLLED STEEL	TEFC	77,10%	47,7	6203	6203	32	14,3

